

<i>LineUp With Math™</i> Alignment Sunshine State Standards, Benchmarks, and Grade Level Expectations Mathematics	
Strand A. Number Sense, Concepts, and Operations	
Standard 3: <i>The student understands the effects of operations on numbers and the relationships among these operations, selects appropriate operations, and computes for problem solving.</i>	
<i>Benchmark MA.A.3.3.2: The student selects the appropriate operation to solve problems involving addition, subtraction, multiplication, and division of rational numbers, ratios, proportions, and percents, including the appropriate application of the algebraic order of operations.</i>	
Grade Level Expectations: Sixth The student: 4. knows proportional relationships and describes such relationships in words, tables, or graphs.	<i>LineUp With Math™</i> Activities --Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.
Grade Level Expectations: Seventh The student: 3. solves real-world problems involving percents (for example, discounts, simple interest, taxes, tips) 5. knows proportional relationships and uses tables, graphs or "constant ratio" relationships to solve and explain problems.	<i>LineUp With Math™</i> Activities --Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control. --Use percent relationships to resolve distance, rate, time conflicts in air traffic control.
Grade Level Expectations: Eighth The student: 2. solves real-world problems involving percents including percents greater than 100% (for example percent of change, commission).	<i>LineUp With Math™</i> Activities --Use percent relationships to resolve distance, rate, time conflicts in air traffic control.
Standard 4: The student uses estimation in problem solving and computation.	
<i>Benchmark MA.A.4.3.1: The student uses estimation strategies to predict results and to check the reasonableness of results.</i>	
Grade Level Expectations: Sixth The student: 2. estimates to predict results and to check reasonableness of results.	<i>LineUp With Math™</i> Activities --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.
Grade Level Expectations: Seventh The student: 2. estimates to predict results and to check reasonableness of results.	<i>LineUp With Math™</i> Activities --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.
Grade Level Expectations: Eighth The student: 2. estimates to predict results and to check reasonableness of results.	<i>LineUp With Math™</i> Activities --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

Strand B. Measurement

Standard 1:

The student measures quantities in the real world and uses the measures to solve problems.

Benchmark MA.B.1.3.2: The student uses concrete and graphic models to derive formulas for finding rates, distance, time, and angle measures.

Grade Level Expectations: Seventh

The student:

2. develops and uses the distance formula in solving real world problems ($d=rt$)

LineUp With Math™ Activities

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

--Identify and resolve distance, rate, time conflicts in air traffic control problems by varying plane speeds or changing plane routes.

Grade Level Expectations: Eighth

The student:

1. applies formulas for finding rates, distance, time and angle measures.
2. describes and uses rates of change (for example, temperature as it changes throughout the day, or speed as the rate of change in distance over time) and other derived measures.

LineUp With Math™ Activities

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

--Identify and resolve distance, rate, time conflicts in air traffic control problems by varying plane speeds or changing plane routes.

Benchmark MA.B.1.3.4: The student constructs, interprets, and uses scale drawings such as those based on number lines and maps to solve real-world problems.

Grade Level Expectations: Sixth

The student:

2. uses scale drawings to solve real-world problems including distance (as in map reading).

LineUp With Math™ Activities

--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

Standard 3: The student estimates measurements in real-world problem situations.

Benchmark MA.B.3.3.1: The student solves real-world and mathematical problems involving estimates of measurements including length, time, weight/mass, temperature, money, perimeter, area, and volume, in either customary or metric units.

Grade Level Expectations: Sixth

The student:

4. estimates solutions to real-world problems involving measurement, including estimates of time, temperature and money.

LineUp With Math™ Activities

--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

--Identify and resolve distance, rate, time conflicts in air traffic control problems by varying plane speeds or changing plane routes.

Grade Level Expectations: Seventh

The student:

3. estimates solutions to real-world problems involving measurement, including estimates of time, temperature and money.

LineUp With Math™ Activities

--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

Grade Level Expectations: Eighth

The student:

1. knows a variety of strategies to estimate, describe, make comparisons, and solve real-world and mathematical problems involving measurements.

***LineUp With Math™* Activities**

--Explore and apply a variety of strategies to optimize the solution of air traffic control conflicts.